Matrix to Assess Climate Change Impacts – Priory Court Development

Aim is to reduce Carbon Emissions (CO2) by 80% by 2050	Positive impact	Negative impact	Mitigation measure	Effect on CO2 emissions (+ or - tonnes of CO2)	Opportunity to promote
Water Water Use and Flooding	Enhanced water efficiency in the new homes –The proposed development will benefit from SUDs such as, permeable paving and ground attenuation tank.	Increased housing numbers and density Increased occupancy means more water consumption and pressure on sewer network which may have impact on surface water flooding.	Enhanced water efficiency in the new homes. Water saving fittings and appliances. Local and London Plan targets to meet 110 litre pp/pd cap on water consumption (this includes 5l for external use).	Not known – will be identified as detailed plans are worked up. Regulated carbon dioxide savings of 67% relative to Part L1A 2013 at Be Green Stage and 10% at Be Lean stage.	Reinforce with new occupants at stakeholder events and handover of new properties New residents to receive technical demonstration of appliances and user manual

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Energy Energy efficiency and energy saving in buildings, including opportunities for installation of renewable energy generation	The development has been designed to provide an efficient building envelope with high levels of thermal insulation and air tightness performance. Rooftop Photovoltaic panels and high efficiency Air Source Heat Pumps to be included in proposals. The energy strategy for the development is an all-electric solution.	There will be an increase in the number of units but this will be mitigated in part by having a more efficient energy standard.	Significantly improved energy efficiency across the new homes and wider estate. 100% of the fixed light fittings in the residences will be capable of accepting only low energy lamps. Throughout the residential dwellings, only low energy LED lighting products will be specified.	The proposed energy efficiency design and LZC applications will achieve: Regulated carbon dioxide savings of 67% relative to Part L1A 2013 at Be Green Stage and 10% at Be Lean stage. A carbon offset payment of £70,395 towards a net-zero carbon building as per The London Plan (2021) with a carbon offset payment of £95 per tonne/CO2 adopted.	New residents to receive technical demonstration of appliances and user manual

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Air Air quality, pollution	Discouraging car use and encouraging walking, cycling and use of public transport. The new development will be car free except for blue badge required provision.	Several years worth of project development period may see short term drops is sustainable transport use i.e cycling, as infrastructure is being implemented	The scheme will include cycle ways, green spaces and private gardens An air quality assessment has been completed and will be submitted with the planning application. There will be no combustible heating systems in the future.	The proposed development is also consistent with Policy 90 of the emerging LBWF Local Plan, as well as Policy CS13 of the existing Local Plan, since the development will provide satisfactory amenity both internal and external to the site and meets the requirement to be air quality neutral.	Reinforce with new occupants. No demolition of buildings required.

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Waste – reducing, reusing and recycling waste	Efficient and up to date waste management and recycling through construction processes through a waste strategy, but also in terms of the facilities provided for the residents once the development is completed	Increased housing density leading to increased production of waste during operation. Potential waste generated through construction.	Efficient waste management and recycling proposals. Space will be provided for bulky waste within refuse stores. Waste strategy and plan to be required and agreed through the construction process. The principal contractor will be required to implement a Site Waste Management Plan (SWMP)	Not known – will be identified as detailed plans are worked up.	Reinforce with new occupants.

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Land Use of brown-field and green-field sites	The proposed development is on an existing part brownfield site	Increased housing density Net loss of some green space. This will be off-set by the higher quality of remaining green space- including landscaping that will enhance biodiversity	Improvements made to estate public realm and new Sports England MUGA and play space.	Not known – will be identified as detailed plans are worked up.	

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Bio-diversity Effects on bio-diversity including green space, trees, rivers and streams	Improved open space and new green space and trees. The newly proposed habitats include species-rich grassland, introduced shrubs, scattered trees, a green roof and green wall. The predicted net-gain in biodiversity for the proposed development is 15.24%	Temporary interruption during construction phases	Bio-diversity management plan will be considered. Bird boxes and bat boxes will be included in the scheme.	The predicted net-gain in biodiversity for the proposed development is 15.24%	The redevelopment of will provide new public realm and improvements to the existing estate.

Transport Travelling to deliver service. Discouraging car use and encouraging walking, cycling and use of public transport	Encouraging sustainable modes of transport through the provision of 164 secure cycle parking spaces and 6 electric vehicle charging points. Car free scheme except for blue badge parking provision. The PTAL score of the development zone is 1b.	Circa 2 year project development period will see short term interruptions.	The estate will have a low car usage strategy for the area. The development is located close to public transport. Cycle parking and safe routes are incorporated into the design of the development. Short term (visitor) cycle parking provision for the proposed residential development will be provided in publicly accessible areas as part of the public realm landscape with one 'Sheffield' stand adjacent to each residential		Reinforce with new occupants.

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			block to provide for visitor cycles.		

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Buildings Adaptability of buildings to heat or flooding. Use of green roofs, rainwater harvesting etc.	To manage surface water run off generated on the proposed site it is intended that a sustainable drainage (SuDS) strategy is implemented. An overheating assessment has been completed which concluded that 100% of spaces assessed pass the overheating criteria by means of mechanical cooling and ventilation.	Minimal	Overheating strategy to be implemented.		Green roofs proposed

Commentary on any differences in financial costings for climate change mitigation / adaptation measures including energy efficiency and potential external grant sources
Not known – will be identified as detailed plans are worked up.
Potential "whole life costing" savings ie: increased installation costs will achieve running cost savings over lifetime; including reduced use of resources eg: water saving devices
Not known – will be identified as detailed plans are worked up.
Explanation of Proposal chosen in context of results matrix assessment, including what mitigating steps can and have been taken
<u>Total Tonnes of CO2 & DEC rating of building to be occupied</u>
The proposals will deliver the Council's CO2 reduction target